

FLIP CHIP PACKAGE WITH HEAT SPREADER ALLOWING MULTIPLE
HEAT SINK ATTACHMENT

Abstract of the Disclosure

A chip package is provided with multiple ways of attaching a heat sink
5 directly to the chip carrier. Corner post are mounted to the surface of the chip
carrier. A heat spreading plate, with a surface area substantially the same size
as the surface area of the chip carrier, is positioned in thermal contact with the
surface of a flip chip, for example. The heat spreading plate has corner cuts to
accommodate the corner posts of the chip carrier and notches cut into at least
10 two opposing sides. A heat sink plate with holes extending therethrough at
each of its four corners is positioned to allow the corner posts of said chip
carrier to extend therethrough. Notches cut in two opposing sides of said heat
sink plate are aligned with the notches in said heat spreading plate to create
slots for a flexible clip to clamp the assembly together. Alternatively, nuts may
15 also be threaded onto the posts to clamp the assembly together.